CENAB-EN-HN 07 August 1998

FACT SHEET

1. **PROJECT DATA:**

Name: Lake Ontario Ordnance Works (LOOW)
Number: C02NY002500, 01, 04, 05
Location: Lewiston/Porter, NY
Phase: Interim Remedial Design (RD), Remedial Investigation/Feasibility Study (RI/FS)
Funding Type: FUDS
A-Es: Roy F. Weston, Inc. (RD)
EA Engineering, Inc. (RI/FS)

2. **PROJECT TEAM:**

Customer: DOD
NAN Program Manager: David Brouwer, CENAN, (732)435-0079
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3. **PROJECT DESCRIPTION:** The former Lake Ontario Ordnance Works (LOOW) site is located within the townships of Lewiston and Porter in Niagara County, New York. The site is approximately ten miles north of the city of Niagara Falls, 15 miles west of the city of Lockport, two miles south of Lake Ontario and less than two miles east of the Niagara River.

The original LOOW site encompassed approximately 7,500 acres with DOD site activity having occurred on 2,500 acres. During 1942-1943, the LOOW was used as a manufacturing plant producing the explosive trinitrotoluene (TNT) for World War II. Portions of the LOOW site have since been used by several branches of the Department of Defense and Energy for various manufacturing and storage activities including the pilot production of high energy fuels.

The manufacturing portion of the plant was situated in the central southwestern section of the LOOW site, south of Balmer Road. Wastewater from the TNT manufacturing operation, as well as stormwater and sanitary sewage, was transferred through an underground sewer network to a wastewater treatment plant located in the western portion of the TNT plant. The TNT waste pipelines ran as one pair of east-west trending lines across the TNT production area before being routed south to the wastewater treatment plant at the west end of the production line.

An overestimation by the Army of the need for TNT during World War II resulted in the closure of the TNT plant in July 1943 after only 9 months of operation. Following the decommissioning of the TNT plant, the majority of the LOOW facility was sold to private citizens with the government retaining the former active 2,500-acre portion of the site.

In 1969, Chem-Trol Pollution Services, Inc. acquired portions of the LOOW for the development of a hazardous waste treatment, storage, and disposal (TSD) facility. Chem-Trol was acquired by SCA Chemical Services Inc. (SCA) in 1973, and subsequently acquired by Chemical Waste Management (CWM) in the early 1980s. In 1972, the Somerset Group obtained an approximate 100-acre section of the former LOOW property which contained Air Force Plant (AFP) 68. In 1979, the southern half of the former AFP-68 (approximately 50 acres) was sold

to SCA Chemical Services. This section is presently owned by CWM. The majority of the LOOW property that was sold to the private land owners consists of the 2,500 acre parcel formally owned by the Government.

4. PROJECT BACKGROUND: Acres International conducted a Remedial Investigation/Feasibility Study (RI/FS) of OU1, from April 1988 until July 1988, under a negotiated fixed price contract with the Kansas City District. The RI/FS performed for OU1 consisted of the TNT pipeline, the Chemical Waste Sewer and the Drum Trench referred to as Area A and the Burn Pit referred to as Area B. A Preliminary Contamination Assessment (PCA)was performed from October 1991 until January 1992, for OU-2 which consists of loose chemicals on the Somerset property and Asbestos. Because OU-1 and OU-2 are adjacent and independent sites, preparation of the OU-1 Final Feasibility Study (FS) was delayed until the results of the OU-2 RI/FS could be obtained. The site-wide RI/FS, to include OU-2, will be performed in FY98 and FY99. The LOOW project was transferred to the Baltimore District in April 1994 at which time the results of the OU-1 FS were combined with the OU-2 PCA into one Engineering Evaluation and Cost Analysis (EE/CA) report. The use of Operable Units (OUs) is no longer being utilized on the project. The EE/CA was finalized in March 1995. The Interim Remedial Design based on the EE/CA was awarded in June 1996.

Due to the limitation on funding, the Interim Remedial Design (IRA) was broken out into two parts. Part one includes work on the Somerset Group property and consists of two phases. Phase I consists the removal of asbestos in area 6 and the removal of miscellaneous chemicals on the property. Phase II consists of the removal asbestos in the remaining areas as well as the removal of up to six inches of asbestos contaminated soils. Part two includes work on the Chemical Waste Management Property and consists of three phases. Phase I consists of the removal of the TNT pipeline and the chemical waste pipeline. Phase II consists of the remediation of Area B and phase III consists of the remediation of Area A.

Part one, Phases I and II proceeded to the 100% design stage and were awarded for construction on 30 June 1998 by the Buffalo District under their Small Project Indefinite Delivery Type (SPIDT) contract. The work plans for this project are currently being reviewed. Construction is scheduled to begin on 17 August 1998. Part two, phase I proceeded to the supplemental 60% design stage and will be placed on the PRAC contract for construction in September 1998 depending on the availability of funds. Phase II and III will also proceed to the Supplemental 60% design stage and be placed on the PRAC in FY99 and FYOO depending on the availability of funds. A comprehensive sitewide RI/FS are currently being performed by NAB. The RI/FS field work is being performed in two phases. Phase I consists of obtaining data to confirm and fill in data gaps from previous work performed at the site. This phase commenced in May 1998 and was concluded in July 1998. The Phase I field report is expected in December 1998. Phase II consists of an investigation of the entire LOOW site excluding those areas identified in Phase I. Phase II will also focus on the groundwater at this site. The RI/FS is not expected to be completed until FY05.

The Baltimore District in conjunction with the Waterways Experiment Station (WES) has implemented an innovative technology project for this site that is being addressed under the Remedial Design. The Research and Development for this project consists of the Bioremediation of TNT and PCBs. WES has investigated and developed a bioremediation strategy for the TNT waste pipeline sediments and surrounding contaminated soils. The investigation for

the bioremediation of PCBs in soils currently underway. The success of the biotreatment strategy for TNT and PCB contaminated sediments and soils at the LOOW site will result in significantly reducing the assessed risk to human health and the environment and minimizing the risk of contaminant migration via the various transport media by reducing the potential sources of contamination.

5. MAJOR CONTAMINANTS: Trinitrotoluene, Dinitrotoluene, Amino-DNTs, Chlorobenzene, Dichloroethane, Methylene chloride, acetone, PCBs, Arsenic, radioactive materials, asbestos, etc.

6. MODE OF CLEAN UP: Remediation of the TNT pipeline, Chemical waste line, various chemicals and asbestos.

7. CURRENT STATUS: The Comprehensive Sitewide RI/FS was awarded in June 1997. The RI/FS is expected to be completed in FY05. The asbestos survey was awarded in September 1997 and completed in October 1997. The Part one, Phase I and II Interim Remedial Action (IRA) was awarded 30 June 1998 by the Buffalo District. The Part two, Phase I Interim Removal Action (IRA) is expected to be awarded in September 1998 under the PRAC contract by Baltimore District, subject to the availability of funds. The Aerial Survey contract was modified in the amount of 16K on 22 June 1998 to include a fly-over of two previously unidentified easements. The Remedial Design (RD) requires a modification in the amount of 50K. This modification will be completed by 30 September 1998 subject to the availability of funds.

8. CONDITION CODE: GREEN

9. ISSUES AND CONCERNS: The availability of project funding for the performance of the Interim Removal Action remains scarce. The RI/FS contract also requires a modification, estimated in the amount of 2.5M, due to the increase in the level of effort performed in the History Search task, GIS data entry task, and the Phase I Conformation Field Work.

10. SCHEDULE.

Phase	Status	Original Start	Schedule Start	Actual Start	Original Complete	Schedule Complete	Actual Complete
RD	U	06/02/95	06/02/95	06/30/96	12/31/97	12/31/97	TBD
RI/ES	U	06/30/97	06/30/97	06/30/97	10/31/01	10/31/05	TBD
RA	F	03/31/98	03/31/98	TBD	10/31/00	10/31/03	TBD

NOTE: The schedule for the innovative technology portion of this project is contingent upon the removal of the TNT pipeline. WES was instructed in December to develop a schedule to reflect the pipeline removal in the spring of 1999. Funding for WES is short by 100K. This could have a significant impact on the schedule and readiness of WES in support of the IRA.

NOTE: The schedule for the Interim RA included with this fact sheet is for Part one, Phase I & II and Part two, Phase I of the removal action. The remainder of the phases included in the interim RA can not be scheduled until funding becomes available.

11. FUNDING.

Fund Type	Previous FY(s)	Current FY	Total
Funds received	$4,652,180	$	$7,302,180
IN-House	$ 740,313	$ 550,000	$1,290,313
Contract	$3,911,867	$	$3,911,867
Unobligated	$	$	$

12. ADDITIONAL FUNDS REQUIRED CURRENT FY: $1,656,459 (To perform Part two, Phase I of the interim RA)and to modify the existing RD contract and continue with the existing R&D efforts by WES.

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